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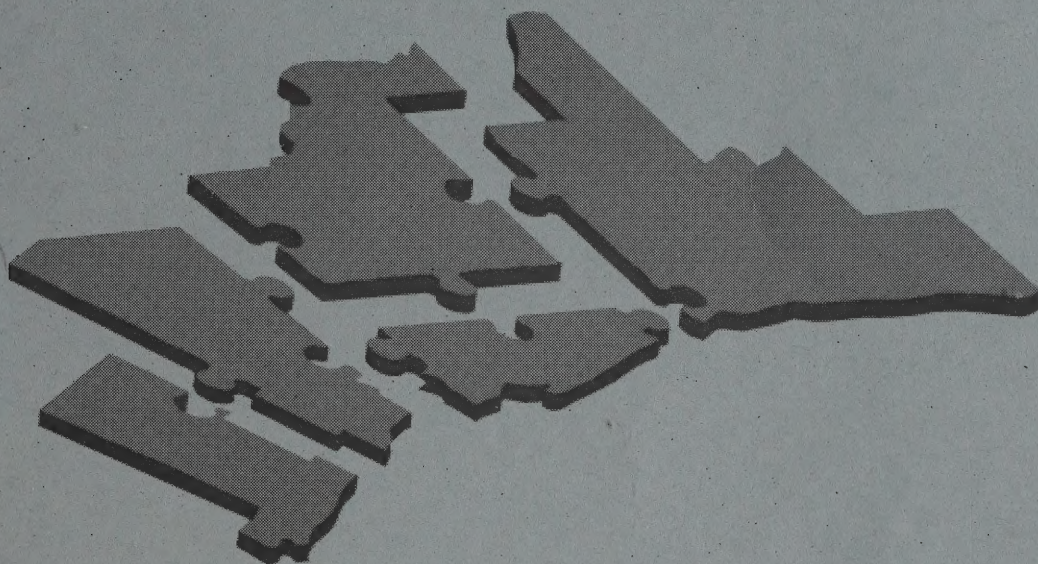
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# *Beyond the Periphery*

A Discussion Paper



Co-ordinating Public Transit  
in the  
Greater Toronto Area









Residents of the Greater Toronto Area (GTA) can be proud to have some of the finest transit systems in North America. But, as this discussion paper, *Beyond the Periphery: Co-ordinating Transit in the GTA*, reveals, comparable services to move people between municipalities are sorely lacking. And, as the number of people who travel across municipal boundaries increases, this issue becomes an immediate priority.

The province, through GO Transit and other initiatives has, in the past, successfully addressed many of these needs. But over the last few years, huge increases in the number of people living and working in communities bordering Metropolitan Toronto and an increase in the number of people driving cars have created new challenges. These new challenges mean that we must do things differently than we have in the past.

With our partners, the province is committed to developing a new approach to integrated transit in the GTA that will meet the needs of its residents in an efficient, fair and cost-effective manner. This document serves as a basis for all interested parties to enter into a discussion on achieving successful transit integration.

By transit integration, we mean transit services, routes, schedules, information and fares are based on people's actual travel patterns, not municipal boundaries. This does not necessarily require one amalgamated transit authority for the entire GTA.

Achieving this goal will not only improve transit service, but also reduce costs by eliminating inefficiencies and decrease environmental impacts by offering viable alternatives to commuting by car.

This paper sets out a vision of how integrated transit might look in the GTA and four basic principles upon which this vision is based. A number of options for a new framework to support these principles are offered for consideration. It will be the mandate of a newly appointed Transit Integration Task Force and its working groups to thoroughly examine these options and to develop a detailed plan of action.

To ensure the broadest possible input, the Transit Integration Task Force and its working groups will include representatives from user groups, transit workers, transit management, employers, and municipalities. In addition, we will be encouraging public comment as the recommendations are developed. Final recommendations will be submitted to me by the Transit Integration Task Force within six months.

For more information, or if you would like to submit your comments by telephone, please call the Transit Integration project team at: (416) 235-5165. We are counting on hearing from you.

Together, we can make public transit even better.

Gilles Pouliot  
Minister







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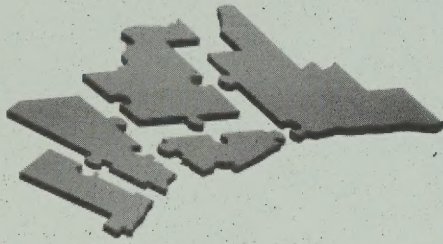






# *Beyond the Periphery*

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## Co-ordinating Public Transit in the Greater Toronto Area

### Summary

Only the occasional sign along the roadside alerts automobile drivers that they have passed a municipal boundary. There is no discernible change in the nature of the road surface, traffic rules, or general street environment. But to the transit user, a municipal boundary presents itself as a formidable barrier. It will usually require a change of vehicle, a significant waiting time in the outdoors and — to add insult to injury — a second full fare will be demanded. These obstacles are a direct result of the multitude of independent transit systems (17) in the Greater Toronto Area (GTA) and the minimal coordination between them.

For people travelling strictly within a single municipality there are some very good transit services available within the GTA, for instance those provided by the TTC in Metropolitan Toronto. But the vast majority of population growth in the past decade has been in areas just outside of Metro. At the same time, companies and offices locating in these newer areas have created jobs that attract many Metro residents. As a result, there has been a 50 per cent increase in travel across all Metro boundaries. And nine out of ten of these new trips are being made by car, despite an increasingly congested road network. Of course, this increase in car use further compounds the congestion.

Repercussions of this escalating congestion include increased travel time for everyone, higher costs for trucking and goods, and negative impacts on the environment such as poor air quality. However, as long as barriers exist to deter people from using transit for their cross boundary travels, this problem will only grow worse.

What are the barriers? Essentially they fall into three main categories: **service**, **fares** and **information**.

**Service** issues include poor connections between buses of two different municipalities caused by different hours of service, long walks to change buses, and the lack of coordinated timing of schedules. It also encompasses special issues such as the "closed door policy" whereby a bus from an adjoining municipality is prevented from picking up passengers at stops in another municipality, even when they are going to the same destination. People with disabilities using specialized transit face special difficulties when they attempt to travel across municipal boundaries.

It has been estimated that people walk a considerable distance across the northern (Steeles Avenue) border of Metro some three million times each year just to avoid paying a double **fare** for a short cross-boundary trip. Clearly, double fares present one of the greatest obstacles to potential transit users. Besides the cost, another important fare issue faced by the cross-boundary traveller is the difficulty in obtaining different types of fare media (i.e. tickets) for two different transit systems. Purchasing a fare in another municipality ahead of time is virtually impossible. A universal ticket or pass would enable people to travel on more than one system much more conveniently by paying only once.

The final category of obstacles, **customer information**, relates to the difficulties in obtaining timely information on the how, when and where of completing a trip by transit through more than one municipality. Since each system is currently equipped to provide information only for its own services, this can become a difficult and time-consuming process for a potential cross-boundary transit user. Multiple telephone calls are required, and maps and other printed information are so inconsistent in scale and scope that matching them







up becomes a formidable and frustrating task. A number of jurisdictions around the world have addressed these problems, created by the existence of many different transit systems, by implementing an integrated transit system. Based on these experiences elsewhere, a **vision** for an integrated transit system in the GTA can evolve. In this vision, route planning would respond purely to the actual travel patterns of users rather than to boundaries. Buses from one area could be timed to meet buses in an adjoining area and their respective stop locations brought into close proximity.

Full fare integration would enable users to purchase a ticket or pass good on any transit system, at a location convenient to them. One of the greatest benefits of a coordinated fare system could be the elimination of the problem of passengers travelling short distances over a municipal boundary having to pay a full double fare.

A coordinated transit information source would eliminate the need for people to be aware of the different transit systems throughout the GTA, and then locate separate telephone numbers for each. Furthermore, printed materials such as maps could be produced that indicated all available services regardless of boundaries.

Besides the three customer-oriented categories of service, fares and information, a vision of integrated transit would include a fourth objective, that of coordinated **infrastructure** planning. A broad-based perspective on planning new capital investments such as rapid transit lines or bus terminals would ensure that the most efficient and cost-effective use is made of limited taxpayer funds. Current and future riders would benefit when transit lines are built to suit emerging needs.

Together with its partners, the province is committed to developing a new approach to transit in the GTA that will achieve a vision based on these four objectives. To reach this vision will require a new organizational model that can address these critical cross boundary issues in a consistent and ongoing manner. A number of organizational models have been identified by

examining similar situations elsewhere in the world. The most promising is that of a **federation** or a joint decision-making body for specific transit functions that would still maintain the autonomy of individual municipalities.

Before the appropriate model is determined, a consultation process is essential. An important part of the consultation process will be the involvement of all key partners (municipalities, users, transit officials, transit labour, employers) in a full discussion of the range of important issues that need to be addressed and a careful consideration of the impact of any change. The key to achieving the vision will be the acceptance and participation by all the partners in the process, so that all can contribute towards the shaping of the final recommendations for implementation.

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*Do you want more information, or have some ideas you want to share? Perhaps you have experienced a problem simply getting information on which bus to take, or in obtaining the correct tickets.*

*We are the Transit Integration Task Force,  
c/o Passenger Modal Policy Office,  
West Tower - 2nd Floor,  
Ontario Ministry of Transportation,  
1201 Wilson Avenue,  
Downsview, Ont.. M3M 1J8*

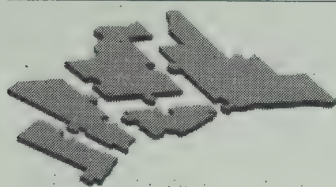
*FAX: (416) 235-4932  
TDD: (416) 235-4986*

*Or you can phone us with your comments at: (416) 235-5165.*









## Co-ordinating Public Transit in the GTA *A Discussion Paper*



Only the occasional sign along the roadside alerts the automobile driver that they have passed a municipal boundary. There is no discernible change in the nature of the road surface, traffic rules, or general street environment. But to the transit user, a municipal boundary presents itself as a formidable barrier. It will usually require a change of vehicle, a significant waiting time in the outdoors and — to add insult to injury — a second full fare will be demanded. The transit user is left to feel *beyond the periphery*.

Imagine for a moment that the auto user is required to stop at each municipal boundary and pay a toll, or worse, change to another vehicle. One can anticipate a reaction that would be swift and loud. But the transit user has been expected to quietly put up with these very conditions.

To the transit user travelling within a single municipality, the transit system can appear well integrated already. For instance, one can travel throughout Metropolitan Toronto by TTC on one fare, with bus, streetcar and subway routes interconnecting.

But to the transit user, or potential user, who must cross a municipal boundary, the inherent difficulties in completing such a trip are a strong reminder of the separateness of the transit systems. Before even starting out on a cross boundary trip, the transit user must gather information from at least two different sources as to the availability of service, the routings, the schedules, the fares, transfer privileges, and so forth.



### The Cross Boundary Commuter: The Case of Tony

*Tony lives in a suburb just over a kilometre outside of Metropolitan Toronto (not served by GO Transit) and works in North York. How does he get to work? He could take transit. He attempted this once but it required a good 10-minute walk to the closest bus stop, then a wait of 10 minutes for the suburban bus. After a 10-minute ride he then had to take a TTC bus. The wait took another 5 to 10 minutes. Already, over half an hour had elapsed and he had just **started** the Metro Toronto portion of his trip.*

*When he takes his car, the same distance takes no more than five minutes. Since his employer offers free parking, his out-of-pocket costs (for gas) is negligible compared to the approximately \$2.50 (\$5.00 roundtrip) for the double fare by transit. When he took the bus, both those fares had to be paid by fumbling for exact change, or by finding locations to purchase the two different appropriate types of tickets beforehand.*

*In addition, depending on the time of year, Tony could have been walking to the bus stops in a howling wind, a driving rain, blinding snow, slush, intense heat, etc. His waits at both stops might have been accompanied by bitter cold or humidity and searing sun. Taking a car, he travels almost totally within a temperature controlled micro-environment.*

The question is not why so few people take transit for cross-boundary trips of this nature, but why anyone with a car and available parking would bother with transit. On every count – cost, convenience, time, comfort – transit fares poorly.

While transit may never quite match the convenience of a car in these circumstances, the challenge then is to somehow balance the equation such that transit use, at the very least, is not discouraged. Transit integration offers

the very real possibility of making transit use a more attractive alternative to the car for the cross boundary commuter.

While not a panacea, a more fully integrated transit system could eliminate double fares, reduce unnecessary transfers for many users and coordinate necessary transfers for others. The end results would be reduced waiting time, improved overall travel time, and more equitable user costs.



## The Challenge

The Greater Toronto Area can no longer rely exclusively on the transit arrangement which worked so well in the past. With the rapid expansion of housing and jobs beyond Metro borders, and the subsequent growing congestion on the arterial road system, an integrated transit system is becoming more and more necessary to influence people to make more of their daily trips by transit.

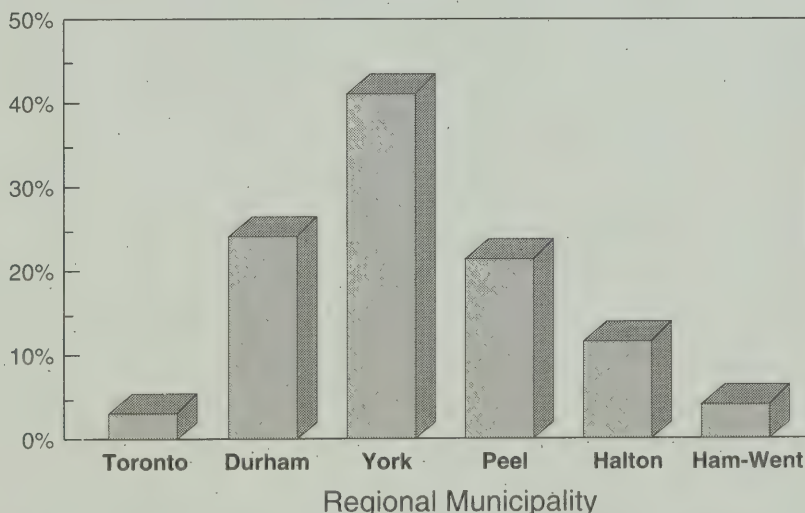
As the demographic and employment shifts in the GTA continue, it becomes increasingly clear that transit integration is critical. Each day in the GTA millions of people travel a myriad of patterns between their homes and various destinations. The key to continued access to a full range of employment opportunities, as well as social, recreational, medical, and other needs, is a truly integrated transit system. For many people in the GTA, including

people on limited incomes or with certain disabilities, the transit system is the only means to reach a job opportunity or other critical services.

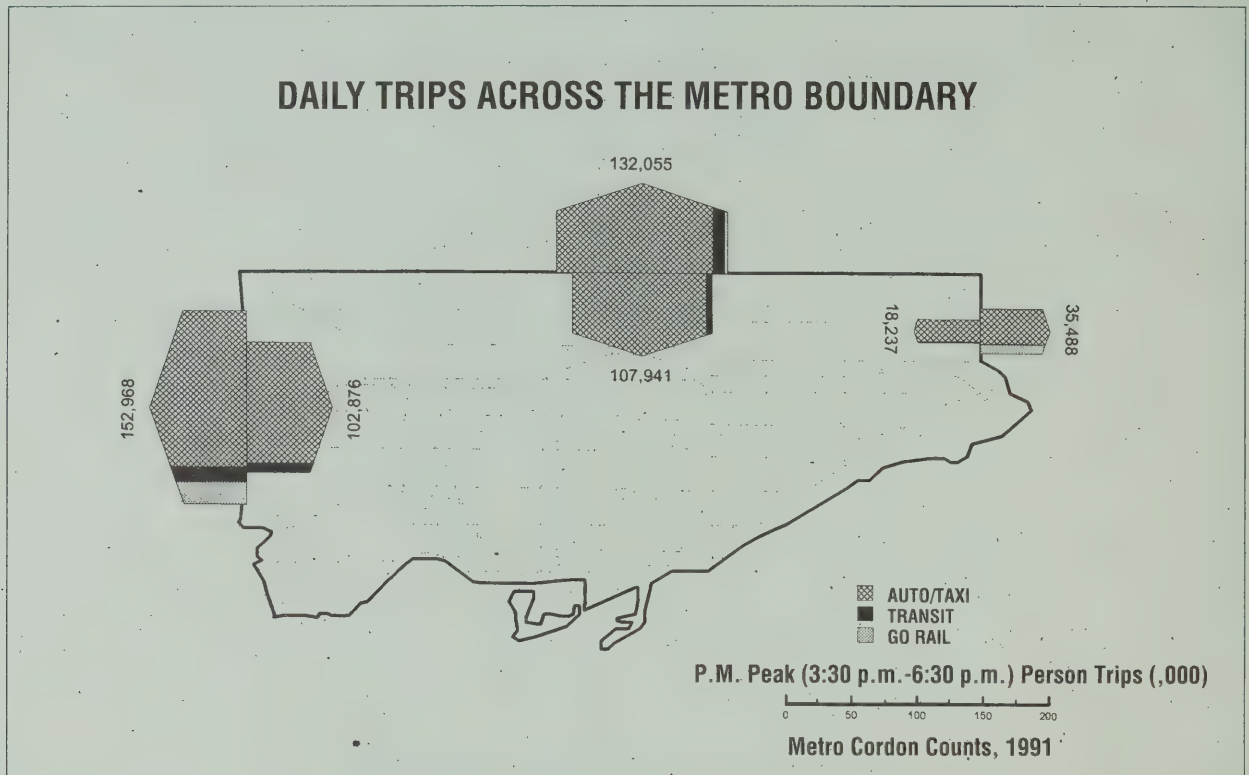
Even those who currently use an automobile for their daily commute may well seek alternative transportation means in the next few years as the time spent travelling each day becomes inordinately long. Recent indicators point to social values emphasizing family-oriented lifestyles, rather than career and materialistic goals, gaining in importance amongst Canadians. As a result, the excessive time spent on commuting in the GTA, especially amongst the increasing numbers of dual-career families, will become even less acceptable. Ever increasing traffic congestion seriously conflicts with this societal goal.

### Population Growth in the GTA 1986 to 1991

Percent Change in Population







### The Challenge *continued...*

Other issues that have become increasingly important to people during the last decade include environmental sustainability and the depletion of non-renewable resources. In response to these concerns more people are trying to reduce their personal use of automobiles wherever possible. Improved transit alternatives would fit nicely with this developing concern.

Stepping away, for the moment, from the user perspective; the critical importance of transportation to the future health of the GTA has become widely recognized in the past few years. Especially in light of the current recession,

hopes for re-establishing the GTA's economic footing are strongly linked to an efficient infrastructure, foremost being the transportation network which is seen as no longer matching the area's growing needs.

Building more roadways is not the solution. More roads consume valuable and increasingly scarce land. In the end, more roads only end up generating more congestion and pollution by encouraging more people to use cars. A comprehensive, integrated, efficient transit network in the GTA is a much more viable alternative for a healthy economy and environment.



## **STRUCTURE OF DISCUSSION PAPER**

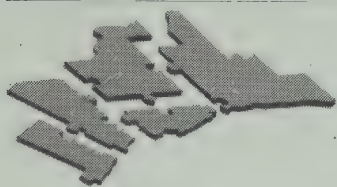
This discussion paper offers a basis for exploring the integrated transit alternative in the GTA. The following chapter will describe some current positive trends towards transit system integration from a user's perspective. Chapter 3 then details the sorts of problems that confront the user in places where two systems are not well integrated.

A vision of what a fully coordinated system might look like, based on some existing models elsewhere in the world, is presented in Chapter 4. Some of the structural impediments that must be overcome in order to move towards transit co-ordination are discussed in Chapter 5. Finally, guiding principles towards a possible model of area-wide transit integration are explored in the concluding chapter.









*Nicole lives in a small town a few kilometres outside of Metropolitan Toronto. She used to drive to her job in Toronto because she found it difficult and expensive to use GO Transit and then pay for a subway ride on the TTC to her office. But since 1988 she has been able to purchase a combined **Twin Pass** that is valid on both GO and TTC. Nicole now finds it simpler and less costly to take a short drive to the local GO Rail station, flash her pass and then be on her way to Toronto.*

*With the increasing road congestion and scarcity of parking facilities during the past few years she finds the overall travel time just about the same. She also prefers being able to use that time to read the morning paper rather than sit frustrated behind the wheel. At Union Station in Toronto Nicole easily boards the subway to get to her office. Again, the Twin Pass enables her to avoid fussing for tokens or money.*

*As an added bonus, during lunch Nicole now has the freedom to board a local streetcar or bus to run an errand or visit a friend, without paying another fare. Previously she would have thought twice about any such discretionary trips since the cost of parking in the area was high, and even the cost of short transit trips add up. She is now looking at saving considerably more money by selling one of her family's two cars which has become expendable since she switched to transit.*

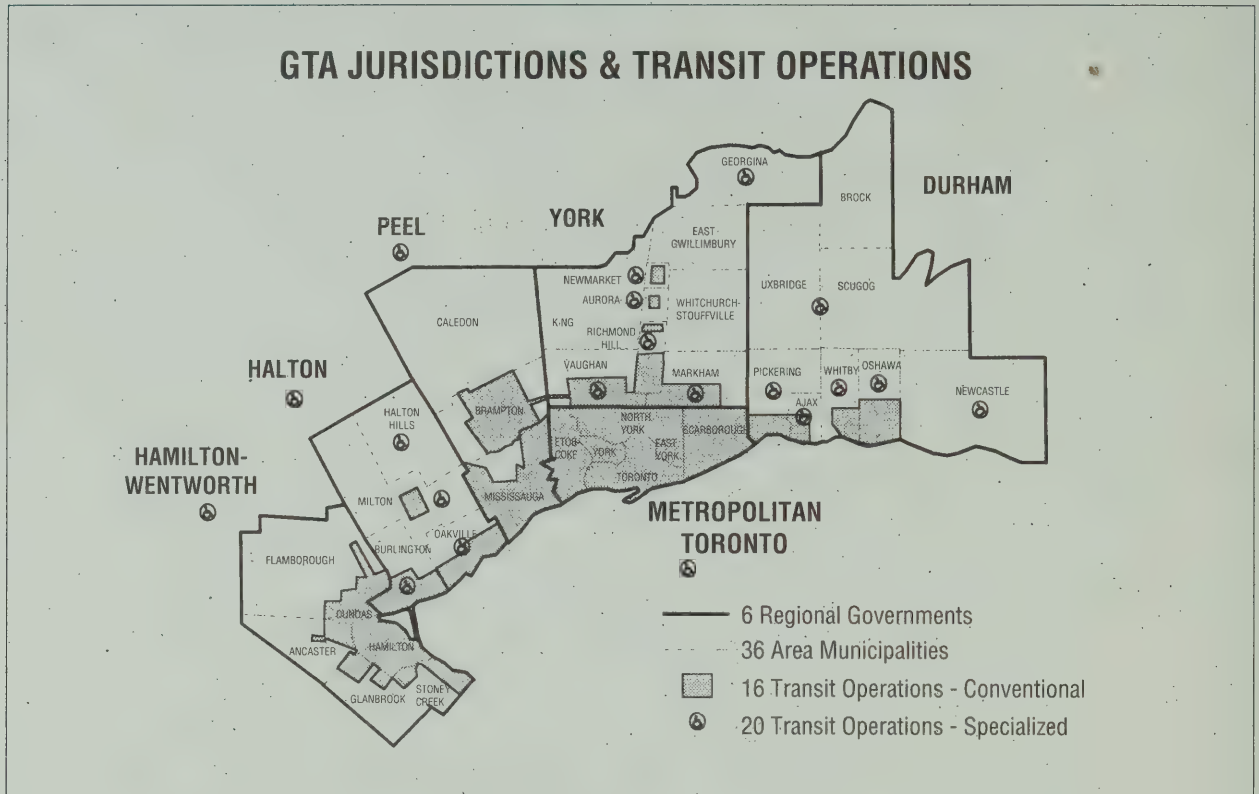
In February 1988, under the leadership of the Ministry of Transportation, GO Transit and TTC began a fare integration and service coordination initiative which has enabled hundreds of daily commuters such as Nicole to enjoy some of the benefits of an integrated transit system. Indeed, for many segments of

the population within the GTA the transit system appears well integrated.

Certainly, most travellers within a single municipality enjoy a co-ordinated system. This is equally true for those travelling strictly within Metropolitan Toronto or the



## Chapter 2 – Current transit integration



Region of Hamilton-Wentworth: Inside all of Metropolitan Toronto one can easily transfer between bus, streetcar and subway, making it one of the best integrated systems in North America. A similar situation exists within the HSR (Hamilton Street Railway) service area. Furthermore, a commuter whose home outside of Toronto, and office in Toronto, both happen to be in easy proximity to GO stations can enjoy a seamless cross-boundary trip.

Even cross-boundary travellers in certain areas will find some degree of integration between systems. This usually takes the form of a free transfer arrangement whereby a transfer from one municipal system is acceptable on another system. This arrangement presently exists between a number of transit systems such as

Mississauga and Brampton in Peel Region, HSR and Burlington, Burlington and Oakville, Markham and Richmond Hill, and other adjacent pairs. However, in most of these instances there are no actual cross-boundary routes.<sup>1</sup> A user must still leave one bus and transfer to another bus at the boundary.

An even more impressive level of integration is offered by a transit route on Highway 7 which is actually operated jointly by two different municipalities (Brampton and Vaughan) from two different regions (Peel and York). However, this is a totally unique arrangement. More typically in these situations, one transit system will extend a service into a neighbouring municipality on a full cost recovery basis. A number of TTC routes have been extended

<sup>1</sup> There are a handful of actual inter-municipal (Mississauga and Brampton) and even inter-regional routes (Hamilton and Burlington). (For a full listing see the Background Paper.) While these serve as possible starting points, there remains much room for further coordination and development.



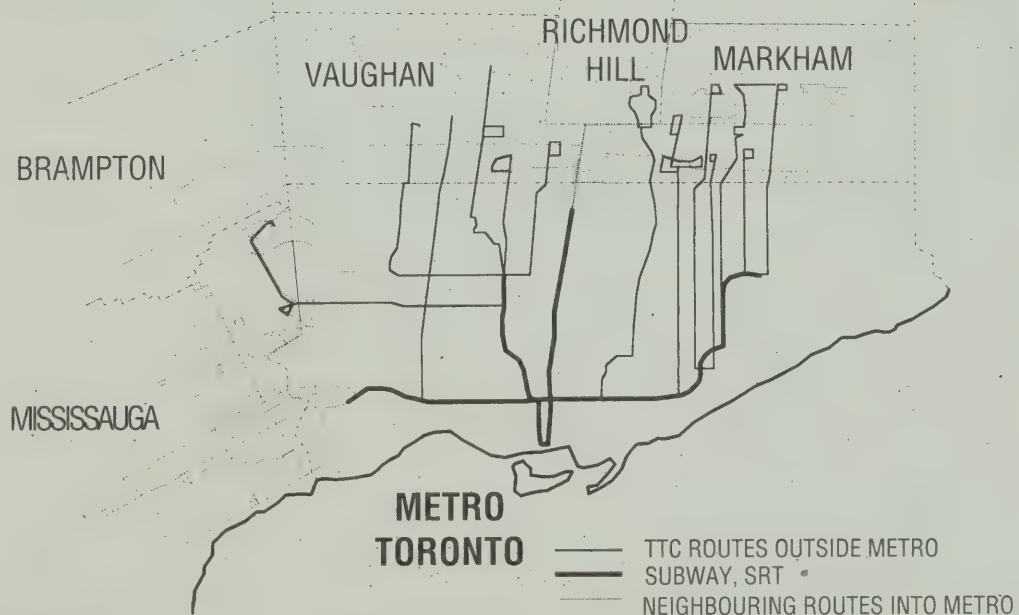
## Chapter 2 – Current transit integration

into York Region on this basis. So while the user can take one bus, they will be faced with a full second fare at the Metro boundary.

Of all cross-boundary transit users in the GTA, it will likely be passengers of GO Transit who will find the greatest degree of inter-system coordination. Besides the Twin Pass arrangement with TTC, GO has entered into agreements with almost a dozen municipalities for fare integration between local-bus systems and GO rail services. As a result, passengers using a local bus in communities such as Brampton, Burlington, Oakville and Pickering can use their GO ticket for free bus travel to and from the GO station. (Mississauga requires an additional sticker for a nominal monthly fee.) In all cases, the user will find certain bus routes and schedules synchronized to GO trains.

Passengers can also transfer free of charge between local buses in Richmond Hill, Markham and Vaughan to and from GO buses along Yonge Street and Bayview Avenue. However, it should be noted that these GO bus routes are operated under the terms of specific contracts with these municipalities.

### MUNICIPAL TRANSIT ROUTES ACROSS THE METRO BOUNDARY





### SUMMARY

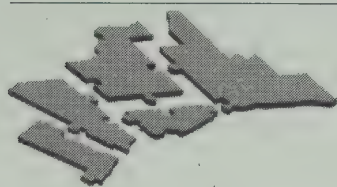
While these, and a handful of other, fare integration efforts have been introduced in the GTA, they only serve a limited portion of cross-boundary transit users. These efforts have required the unusual cooperation of the different systems in the absence of any formal co-ordinating body. In the more significant cases, such as the GO-TTC Twin Pass, it has required the specific leadership of the province to reach an agreement.

For those users who are in a position to take advantage of these arrangements, transit has become a much more economically desirable option. No longer is a second full fare required for their trip. The increased municipal bus ridership to and from GO stations and the growth in Twin Pass sales in the past couple years are a good indication of the positive impact these agreements have had on people's commuting decisions.

Efforts in terms of service co-ordination have been even less frequent than fare agreements. Even when they have been implemented, the lack of any formal structural arrangement has meant no ongoing monitoring and subsequently any future adjustments to one route are not co-ordinated with the other route. Very little progress has been made in areas such as joint infrastructure planning or information and marketing.

Having examined some of the co-ordination efforts already in existence, in the next chapter we will touch on the various problems faced by the cross-boundary transit user where such agreements are limited or non-existent - the more common occurrence.

## *Beyond the Periphery*



A number of obstacles facing the cross boundary transit user, or potential user, have already been mentioned. What follows is a summary of these key issues from the perspective of these users.

### **I. Service**

#### **1. Arbitrary Transfers**

Since each municipality only has a mandate to provide service within its own boundaries, transit routes do not necessarily reflect the travel patterns of the users.

Rather than having a through service across municipal borders, passengers are often forced to get off and wait for another bus. Typically, these two different transit services are not synchronized, so not even timed transfers exist. The result for the rider is the discomfort and inconvenience of changing buses and additional waiting time. This also impacts special transit services for people with disabilities who must make very awkward transfers at municipal boundaries.

#### **2. Service Gaps**

At times, even changing to another transit system's bus is not possible at a municipal boundary because of a lack of co-ordinated service. Each municipality has a mandate to serve its own population and area, not those coming from or going to an adjacent

area. These gaps are most apparent where the urban development within one municipality has not reached its mutual boundary with another municipality. The former may find it difficult to justify extending its service to its boundary simply to serve those traveling across that boundary. Problems also arise because of different hours of service in adjacent municipalities. A user may find that the bus in one area only connects with a bus in an adjoining municipality during daytime hours.

#### **3. Indirect Routes**

In order to avoid crossing municipal boundaries, bus routes are often designed in circuitous patterns. The user is faced with routes that either don't go where they want to go, or get there in a very roundabout, time consuming way. As an example, in Mississauga, the Route 7 bus must make a number of loops, and change directions a number of times, rather than operate along a more straight forward route.

#### **4. Closed Door Policy**

Many cross boundary services that do exist must operate on a "closed door" policy in the adjacent municipality. That is, they may not pick up passengers along a great portion of their route. This results in potential riders not allowed to board a half empty bus heading for their desired destination.



### I. Service *continued*...

#### 5. People with Disabilities

We have mentioned the particular difficulties inherent in transferring between two vehicles. But the extraordinary problems faced by persons with disabilities using an unco-ordinated system are even more severe. Special transit for people with disabilities requires prior reservations. People crossing municipal boundaries must not only book separately with different systems that have different sets of regulations, they must then try and co-ordinate a transfer between the two services. Further compounding their predicament: since trip refusals due to lack of space or service are a problem in each individual system, in these circumstances the potential for a rider not being accepted is greatly increased.

## II. Fares

#### 1. Fare Inequities

Each of the existing transit systems operates and collects fares within its own boundaries independently. For the passenger who happens to cross over one of these boundaries, typically, a second full fare is required. This creates vast inconsistencies. One user might travel a significant distance (for example across all of Metro Toronto) on a single fare, whereas another user travelling a very short distance just over the Metro boundary is charged two full fares. Just to

avoid paying this second fare, each day thousands of people walk a considerable extra distance to cross a municipal boundary even though they could have taken a local bus.

#### 2. Different Fare Media

Besides the cost of paying a second fare, the cross boundary passenger suffers the inconvenience of having to be aware of the individual costs to ride on each system and of having the exact change or appropriate ticket on hand in two separate instances. Some properties do not even issue tickets, while others do not offer passes. Since the different fare media usually have to be purchased in different locations, this only adds to the confusion and inconvenience.

#### 3. Inconsistent Fares and Discount Policies

Each municipality sets its own fare rates and policies. They also determine their own form of identification for eligibility for special concessionary fares. This can create confusion, inequities, and act as a deterrent in transit use. For example, students are usually eligible for a discount only when boarding within the municipality where they attend school. If their home is in another municipality, a full adult fare must be paid.

# We'd like to hear from you.

*Have you ever had a problem when you tried to take two different transit systems for a trip you were making? Perhaps it was a problem simply getting information on which bus to take, or difficulty in obtaining the correct tickets. Whatever it was, we want to hear from you. Please take a moment to fill out this coupon and send it back to us.*



## TO: The Transit Integration Task Force

☐ YES, I had the following problem when I tried to take more than one transit system:

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☐ NO, I haven't had a specific problem, but I do have the following thoughts for you to consider:

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*Please detach this page (add more pages if necessary) and mail or FAX us at:*

**Transit Integration Task Force**  
Passenger Modal Policy Office,  
West Tower - 2nd Floor  
Ontario Ministry of Transportation  
1201 Wilson Avenue  
Downsview, Ont. M3M 1J8

**FAX:** (416) 235-4932  
**TDD:** (416) 235-4986

☐ Or you can phone us with your comments at: (416) 235-5165

*[OPTIONAL] To be added to our mailing list for future updates and notices of any public events on transit integration in the GTA, please provide us with your address:*

Name: 

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Street: 

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City 

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 Postal Code: 

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 Phone No.: ( 

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### III. Information

#### 1. Telephone Information

Each municipal transit system maintains its own separate public information system. Potential cross boundary travellers must first somehow determine which systems they will need to take, then find the appropriate phone number to reach them, and then make two or more separate phone calls (perhaps being put on hold for each call as well). Furthermore, it is then up to the user to put the different pieces of information together to determine which is the best overall trip combination in terms of transfers and schedules.

#### 2. Maps and Other Printed Information

Currently, each municipality produces maps and schedule information strictly for its own system. After determining where and how, the potential transit user must then go about obtaining these from different sources. The varying degrees of information provided, the different symbols and colour coding, the variation in scale of these printed materials and the altogether incompatible formats, can make it difficult for people to interpret and correlate.



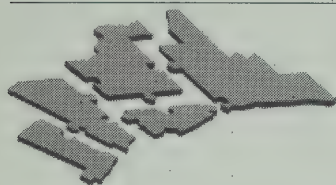


### SUMMARY

A cross boundary traveller might find any one of these obstacles — say the double fare — sufficient cause to reject transit. Or, they might perceive a combination of hindrances — such as trying to find out which buses to take and how to obtain the proper fares — as too formidable. Either way, each of these barriers act to dissuade people from using transit for cross boundary trips. These are the user-level issues that must be addressed to make inter-municipal transit attractive to people.

There is little doubt that if these obstacles were removed there would be an immediate and positive impact on the current cross boundary transit user. What is more, people who currently find transit too inconvenient would be much more likely to give it a try. Certainly, the experience elsewhere has indicated that this would be the case. In the next chapter we will turn to some of these experiences elsewhere and begin to describe what a truly integrated transit system might look like in the GTA.

### *Beyond the Periphery*



*Deitrich lives in a suburb a few kilometres outside of Hamburg, Germany. He works in central Hamburg. How does he travel? He could drive. But traffic congestion and gasoline prices seem to increase all the time and what little parking is available downtown is quite expensive. The transit system is much more reasonable. By dialling the central transit information centre, a computerized passenger information system provides optimal travel information for his destination on any combination of modes. A local feeder bus stops within a few metres of his house. The bus will travel directly into a U-Bahn (subway) station for a synchronized connection. Deitrich's transit pass — which automatically renews by mail monthly with a direct bank withdrawal — allows him unlimited rides on all local buses as well as the U-Bahn and the trams.*

In our composite case in Hamburg, Deitrich's decision to use transit for his daily commute is a logical outcome of the policies put into place by the creation of the HVV (Hamburg Transit Association). Prior to 1967, Deitrich would have been faced with a multitude of separate transit carriers, each with its own fare structure, competing schedules, and information. With all the confusion and effort involved he would have likely relied on his automobile for the trip.

The inception of the HVV had an immediate impact on commuters. A framework was created that ensured a high degree of service orientation, greater efficiency, fair revenue

sharing, equity in decision making and region-wide planning. Within two years, the steady downward trend in transit ridership had halted and a significant 4 percent increase was registered.

What would a similar arrangement in the Metropolitan Toronto area look like? We can gain a feel for it by looking at the three broad categories of service, fares, and information.



### Service

*Tony boards a small feeder bus that stops within a short walk of his house in Woodbridge. That bus will whisk him to the new gateway station where a number of other similar feeder buses are synchronized to meet a larger trunk route bus. In a weather-protected enclosure, Tony will easily and swiftly enter the larger bus which will then proceed along its route (in a special lane) through North York to drop him right near his office.*

In a co-ordinated system, the existing municipal boundaries become inconsequential. As a result, route planning can respond purely to the actual travel patterns of the users. So if there are enough people travelling each day from an area just outside one municipality to an area within another municipality, there would be a new or modified service provided to fill that specific need.

That service could be instituted quickly, and provided by the operator who is in the best position to deliver it most effectively, without special arrangements or the need for involved agreements. Furthermore, the need for that service would likely be identified much earlier due to co-ordinated data gathering efforts.

Even in areas where the numbers of people needing to make a specific commute would not necessarily warrant a new or modified service, other tools become available under a co-ordinated system. For instance, buses from one area could be timed to meet buses in another area where previously no co-ordination or transfers existed. Just the knowledge that the waiting time for a transfer to a second

bus will be minimal can be an important consideration for a commuter.

Besides comprehensive route planning, integrated transit would, for the first time, create the basis for systematic area-wide planning for infrastructure. Co-ordinated planning of infrastructure can lead to the joint development of transit stations and shelters to make unavoidable transfers as pleasant as possible for users. Planning and design of other infrastructure, such as rapid transit lines and bus lanes, could be done on a GTA-wide basis, providing benefits to the greatest number of users and optimizing the cost effectiveness of these major investments.

## Fares

*Tony's transit Unipass is similar to a credit card and paid for by direct withdrawal from his bank account, for which he receives a partial rebate from his employer. It is valid on the entire transit network in his neighbourhood, as well as in certain surrounding zones, including the places he usually travels to in Metro Toronto. He no longer has to worry about exact change, or different fares. (On the rare occasion when he travels outside the limits of his particular pass, he only needs to purchase a modest add-on fare.) He finds it a real convenience to just "swipe" his pass when he boards originally, and then not have to think about it again for his entire trip.*

Full fare integration would enable users to purchase a ticket or pass good on any transit system, at a location convenient to them. No longer would there be a need to purchase different types of fares in separate locations and to then carry a variety of tickets or passes for the different systems.

One unified pass could be made available to allow travel on a number of systems, similar to the one introduced in Paris, France. There, the Carte Orange, a universal monthly transit pass has been a huge success. More than 50 percent of Paris transit riders use the Carte Orange which is valid on buses, subway, commuter rail, suburban train and coach lines. It has been so well received by residents in the Paris Region that it has raised the general image of public transit and has resulted in a switch from car to transit at an estimated rate of 70,000 daily journeys.

A unified pass system in the GTA would enable employers to offer subsidized transit

benefits to employees similar to, or in place of, free parking. The Carte Orange is subsidized 50 percent by employers.

One of the greatest benefits of a unified pass system would be the elimination of the problem of passengers travelling short distances over a municipal boundary having to pay a full double fare. Even in places where there are existing through service over the Metro Toronto boundary, the second fare forces thousands to walk a considerable distance to avoid the cost.

If fares were based simply on distance travelled, no one would face paying a second fare. Short distance riders everywhere, including those in the city centre of every municipality, would enjoy the benefits of a lower fare. This would encourage usage of transit for short discretionary trips in off peak hours such as during lunch time.



### Information

*A single phone number (1-800-TRANSIT), toll free from anywhere in the GTA, allows Tony to find out everything about travelling by transit. The best route to take, the total travel time, the times of the next few buses near his house, the connections, the last bus back — all are available instantly. He also has one of the new computer generated area transit maps which details all the routes, hours and frequency of service for the entire area in which he and his family travels.*

One centralized transit information source would eliminate the need for people to be aware of the different transit systems throughout the GTA, and then locate separate phone numbers for each. Rather than bothering to seek out all the bits of information necessary to take a cross boundary transit trip, they could more simply decide to take their car. The ability to access the complete information for the trip by making a single phone call will

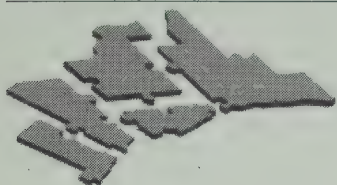
greatly enhance the ability of transit to attract these auto users.

Similarly, it is often difficult to obtain a map or printed information on one transit system if you are located in another municipality. By eliminating these restrictions, more complete printed information could be made available to the public at large.

### SUMMARY

A number of European urban centres have been in the forefront of regional transit co-ordination for the past two decades. They have demonstrated that these efforts can lead to streamlined operations. From the users' perspective, these changes have enhanced their ability to use transit in a number of very positive ways. This greater attraction to transit has translated into increased ridership and revenues in places where the trend had been downward.

Why can't similar co-ordination be accomplished in the GTA? What are the institutional barriers that exist? It is for an examination of these questions that we now turn our attention.



For the most part, transit throughout Ontario is planned and operated within a municipal context, with local authorities responsible for all aspects of the service. Within the confines of each individual community, this arrangement provides a satisfactory and efficient means for the delivery of appropriate local transit services.

However, the municipalities within the GTA are not isolated, self-contained entities. Land use, population settlement and travel patterns all reflect a different reality: a larger, integrated expanse. And therein lies the crux of the problem; a variety of transit systems operating independently in what has otherwise become an undivided area.

### **The multiplicity of systems**

The existing 14 municipal systems and two regional systems (Toronto Transit Commission and Hamilton Street Railway) in the GTA receive funding assistance from the Ministry of Transportation for capital and operating expenses based on established formulas and guidelines.

While individual municipalities or regions have the option of either operating the system on their own or contracting out for transit services (or a combination of the two), the local level retains the ultimate responsibility for all operational and administrative decisions: everything from routes, frequency of

service, hours of operation, labour contracts and fare structures, to the colour of the buses. As long as the system meets certain basic criteria in terms of operating a "service on a fare basis to the public," the ministry provides its funding with minimal restriction or direction.

In addition to these local systems, GO Transit provides inter-regional commuter transit services within the GTA. GO Transit functions as an independent operator reporting to the Minister of Transportation through the Toronto Area Transit Operating Authority (TATO). TATO is under the control of an inter-regional board comprised of the chairpersons of the six regional municipalities.

Given the current organizational environment, these 17 transit systems have minimal formal contact with one another.<sup>2</sup> While there have been instances of co-ordination in service or fares, these have largely been the result of unusual interventions on the part of the province, or sporadic initiatives by two or three municipalities, rather than as a natural outgrowth of any pre-existing organizational relationship.

This absence of a larger organizational framework is less of an impediment to spontaneous co-ordination where two (or more) adjacent municipalities and transit systems are of a similar size, or where GO Transit has been involved. In these instances it has been possible for them to enter into negotiations for what

<sup>2</sup> The Transportation Planning Forum (see Background Paper for details) does provide for some interaction between systems to discuss common problems but lacks a strong enough mandate to accomplish more ambitious goals such as coordination.





### The multiplicity of systems *continued...*

are clearly perceived by all parties as mutually beneficial service and fare integrations. For example, this was the case in the recent agreement between three municipalities in York Region for a common transit pass; Brampton and Vaughan operate a joint service on Highway 7; and a number of municipal systems have entered into agreements for full-fare integration with GO Transit.

Attempts at negotiation between smaller systems and the TTC have been less ambitious. While there are numerous TTC routes that are contracted by surrounding municipalities to provide some service across the Metropolitan Toronto boundary, there has been little in the way of true service co-ordination (such as synchronised schedules) and no fare integration.

Even where progress has been made, such as with the TTC-GO Twin Pass and service co-

ordination initiatives, this has required ongoing provincial leadership and has faced a painfully long approval process due to the lack of a streamlined organizational framework.

## Legislation

Further limiting the extent of co-ordination between systems are the various existing pieces of provincial legislation and municipal

acts (see Background Paper for details). For instance, the major thrust of the regional acts is to emphasize transit operation within the region itself while remaining mute on the subject of inter-regional transit. Even in the case of the TTC, where the Metropolitan Toronto Act authorizes agreements with adjacent municipalities, this can only be done on a strict 100 percent cost-recovery basis.

## Provincial funding

The existing provincial funding formulas can also act as a deterrent to inter-regional transit co-ordination. Since the rate of base operating support is calculated inversely to the overall population level in the service area, the merger of two or more municipalities is likely to result in a reduced rate of funding. This residual impact of the existing funding formula has also acted as a perceived obstacle to implementation of regional transit within individual regions.

Even if various transit systems were not to merge, but simply to attempt greater service co-ordination, the differential rates of provincial funding and the existence of special subsidies complicates the introduction of innovative co-ordinated services. For instance in the case of a potential new cross-boundary route, one municipality could be eligible for a greater provincial share than the other municipality.

Furthermore, the lack of any formal mechanism for municipalities to share capital costs prevents co-ordination of planning for infrastructure investments. For instance, one municipality may be unwilling or unable to fund the construction of a sheltered bus station for transferring passengers who are largely coming from another municipality or along a municipal boundary where service is offered by one municipality but the shelters would fall within another jurisdiction. Similarly, the design of a facility may not reflect the needs of all potential users. For example, the TTC is less inclined to consider the needs of non-resident commuters in the location and design of a subway station.

### Distribution of revenues and costs

Revenues and costs are the two key factors in the formula used to determine provincial funding for transit in each individual municipality. Target revenue to operating cost ratios are established based on the population of the municipality. Base funding is then paid equal to 50 percent of this theoretical net cost. Any attempt to co-ordinate fares and service will have to come to grips with this arrangement.

As long as each municipality has its own fare system, it is a relatively straight-forward exercise to determine its total revenue. But what happens when the same ticket/pass can be used on a number of systems? The determination of which municipality gets what portion of revenue, or even is credited with that revenue, can be a contentious issue.

Accurate assignment of costs can also become complicated. As long as service is operated strictly within a municipal boundary, cost may be assigned. Cross-boundary routes, however, require negotiation over the allocation of costs (e.g. should it be by distance, time or number of passengers?). On the flip side, should any savings result from service rationalization, how would the benefit be distributed?

Without a uniform arrangement which clearly defines the guidelines for introducing these services, there is a real hindrance to the introduction of new or revised routes that cross municipal boundaries, particularly multiple boundaries.

Another cost hurdle that has already been raised in attempts to regionalize transit in the GTA is the issue of local capital investment in existing systems. Depending on the type of arrangement that is developed, consideration will have to be given to these previously incurred municipal expenditures and how they are distributed.

Besides service and capital costs, a guideline would have to be developed as to sharing of costs associated with a joint information/customer service arrangement, and a joint marketing program.



## Chapter 5 – Considerations in implementation

Finally, one of the major cost issues that will have to be addressed up front is the funding of any new co-ordination structure. The introduction of any new organizational framework will have associated costs. An appropriate funding arrangement will need to be put in place from the start.

### Local identity

Beyond all the technical structural impediments that have been discussed so far, there are the more abstract issues related to local identity and empowerment that can take on a special importance to a municipality.

It can be assumed that a local community takes pride in a bus travelling through town with its logo emblazoned on the side. But what logo and

colour scheme should a bus bear that could be serving more than one municipality?

In fact, it can be expected that the higher the level of system integration, the weaker the degree of separate corporate identity. Tickets, maps, printed materials, even the name used in answering the information phone number, are all part of a carefully cultivated local municipal image. While the typical user may care little about the colour of the bus exterior, especially if it will hamper smooth transition over municipal boundaries, civic pride is an ongoing concern that will have to be acknowledged.

Concern may be raised about the degree of responsiveness to local needs that a co-ordinated system might provide. It will be important for any co-ordinated organizational body to afford a similar level of accessibility.

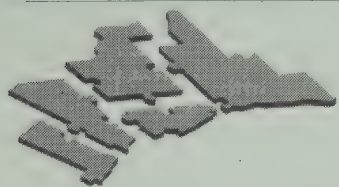
### SUMMARY

Co-ordination in the GTA is becoming increasingly necessary not just for transit, but for other critical issues ranging from land-use planning to waste disposal. But the co-ordination of a number of disparate bodies is never an easy task. Under the present circumstances it will present a major challenge to the introduction of a higher degree of co-ordination in area transit.

The provincial government can certainly ease the transition by taking certain steps, such as restructuring its funding program to encourage integrated systems. But all stakeholders, including the participating local authorities must make a commitment to seek an arrangement that will be in the best interests of the wider community and all of its residents. Only by adopting this wider view can the support evolve for the solutions that will ultimately best serve local needs as well.

Having now surveyed the existing structural impediments to further transit co-ordination, a discussion of an appropriate model for the GTA can begin.

## *Beyond the Periphery*



Earlier chapters have shown that, despite some significant breakthroughs, the inter-regional transit user in the GTA still faces any number of barriers. Even the occasional breakthroughs can be characterized as isolated phenomena rather than as part of any systematic plan. And therein lies a major shortcoming.

It was once thought that by simply allowing the current arrangement to slowly evolve, sufficient levels of co-ordination would eventually manifest themselves. But while there has been positive movement, it has been slow, uneven, and has already bumped up against structural restraints that threaten further progress.<sup>3</sup>

Worse still, what little lead time once existed has quickly vanished. Transportation in the GTA has reached a critical point and is only getting worse. The tremendous acceleration in inter-regional travel is over-burdening the arterial road network. At the same time, transit systems are facing declining ridership and revenues. Even the TTC, a model for transit systems all across North America, faces unprecedented problems in this regard.

While area-wide transit co-ordination and integration is by no means a panacea, it increasingly appears to be an essential ingredient in any long-range solution. Studies and proposals for transit co-ordination in the GTA have been issued for over a decade. Yet actual progress has been slow in a period that experienced strong economic growth coupled with steady transit ridership gains (largely due to

## Chapter 6

### TRANSIT INTEGRATION: A DISCUSSION MODEL

growth in certain segments of the population) which together masked some developing problems.

Now that the situation has turned, there is a sudden sense of urgency. In its most recent (1991) Long Range Plan, the TTC discusses these impeding problems. A number of key recommendations are made in the plan.

Number 3 reads:

***The TTC should continue to support the Province of Ontario's lead role in inter-regional transit planning...***

This theme is reinforced in Recommendation 4:

***The TTC should examine its linkages with GO Transit and other municipal transit properties to determine where opportunities exist to increase customer convenience and ridership through further improvements in service co-ordination and fare integration.***

Clearly, the TTC – a key partner in any new effort – already recognizes the essential role to be played by inter-regional transit co-ordination. Similar concerns have been expressed in other municipalities, such as in the Mississauga Ten-Year Transit Service Strategy Study.

<sup>3</sup> For instance, see the Background Paper for a description of ongoing difficulties in achieving fare coordination between TTC and Mississauga Transit.



### Guiding principles

A truly co-ordinated transit system would be guided by certain basic elements or principles. These principles relate to the earlier discussion on a vision of what an ideal GTA transit system might look like.

Taken together, these basic elements would remove unnecessary physical, administrative or inconsistent fare barriers for transit users. At this point, these principles can form the basic mandate for a discussion of how to go about the restructuring of the current inter-regional transit delivery organization.

The four principles are:

- ◆ Seamless Service
- ◆ Integrated Fare System
- ◆ Area-wide Capital/Infrastructure Planning
- ◆ Centralized Customer Information

Given these principles, the discussion must turn to the types of institutional frameworks that would meet these goals.

### Institutional arrangements

A number of earlier studies have identified the range of possible organizational options that are available. A variation on each of these can be found in regional transit systems around the world.

- ◆ **Co-operation:** various operators/municipalities work together to improve service connections, fare integration, and solve common problems through formal/informal meetings with/without provincial encouragement.
- ◆ **Co-ordination:** similar to Co-operation, but introduces a formal representative co-ordinating body, separate from the operators, which allows for (optional) co-ordination of certain specific activities.
- ◆ **Federation:** formation of a joint decision-making body of operators for integration of specific transit functions while maintaining individual municipal identity and responsibility.
- ◆ **Amalgamation:** merging of all or some operators into a single entity with fully centralized decision-making on all aspects of transit planning and operations.

### Existing situation

As was discussed in Chapter 2, some degree of fare integration and service co-ordination (FISC) already exists in the GTA. But even that has largely come about by way of the lowest level of intervention: co-operation. As a result, there are distinct limitations in the progress that can be made, and what progress has been made has been slow in coming.

There has been some instances of technical co-ordination through the ministry. Successes

such as the TTC/GO Twin Pass, reciprocity agreements for Senior Passes and physical improvements for GO/TTC connections, can all be attributed to those efforts. But this level of involvement has been sporadic.

It has become increasingly clear that a new arrangement, something that can go well beyond the existing intermittent incidents of co-operation and the even less frequent technical co-ordination, is necessary. Retaining the status quo just will not accomplish enough, certainly not within an acceptable timeframe to

meet existing needs or fulfil a vision of an environmentally friendly urban transportation system.

At the other extreme, the Amalgamation option has been rejected by previous studies as being unnecessarily excessive in the GTA context. While that may have been the case in the past, under current conditions this option may still merit some consideration. Therefore, as a starting point, a full range of options for consideration are presented within the Co-ordination, Federation and Amalgamation frameworks:

### Institutional options

#### CO-ORDINATION

- C1. Provincial Leadership** - Formalization of existing FISC process and arrangement, but with uniform rules and approval process for certain proposals requiring co-ordination.
- C2. Provincial Leadership with Area-Wide Transit Advisory Group** - Creates a representative body to provide independent input on transit co-ordination.
- C3. Provincial Leadership with Area-Wide Transit Co-ordinating Agency** - Institutes a representative agency with specific resources and responsibilities to take the lead role in co-ordinated transit planning.
- C4. Area-Wide Transit Authority** - Establishes an independent organization with overall transit funding and co-ordinating responsibilities.

#### FEDERATION

- F1. Limited Purpose Federation** - Only selected common functions would be co-ordinated by the Federation.
- F2. Limited Participation Federation** - Only some of the operators in the GTA who may opt to be included (e.g. Metro, Durham, York and Peel) in any single Federation.
- F3. Full Federation** - All operators join together for most purposes other than actual operations.

#### AMALGAMATION

- A1. Limited Participation Amalgamation** - Only operators in the Metro Toronto area of the GTA (e.g. Metro, Durham, York and Peel) would be merged into a single operating authority.
- A2. Full Amalgamation** - All operators in the GTA are merged into one operating authority.



# Deciding on a model

### CRITERIA

The selection of an appropriate option will require broad consultation and discussion. To reach a decision, it will be important to consider certain criteria based on the issues that have been raised in this paper.

Three basic areas of concern will need to be addressed: effectiveness, responsiveness, and implementation issues.

#### Effectiveness:

Essentially, how well a particular model can actually accomplish greater co-ordination. This includes inter-municipal co-ordination of planning initiatives, as well as co-ordination of both conventional and special transit services (routes and schedules), and fare integration. Other key issues include the ability to act as an advocate for the transit user and operators, to promote transit to attract new users, and to provide a framework for consistent transit policy making throughout the area and over time.

#### Responsiveness:

Clearly, the option must be responsive to the needs of all stakeholders. Besides the actual transit users, this must also include operators, elected officials, labour, funding agencies, and especially, the general public. In order to successfully achieve this, the model must clearly assign responsibility for dealing with inputs from various people and groups.

#### Implementation Issues:

These issues are related to the ease of actually putting any particular option into operation. Acceptability of the option is an important

component. All stakeholders, including elected officials, transit users, operators, and special interest groups, must be consulted. While no single option is bound to please everyone, a certain degree of acceptability will need to be reached.

Related to the acceptability is the extent to which the option avoids any unnecessary change to the existing organizational framework. While change is essential, it will be advantageous to adapt as much as possible to the current environment.

In the present economic climate, an important aspect of implementation will be the financial costs of the change. Questions on every aspect of expenditure related to the change will have to be answered. It must be clear that the value achieved is well worth the costs involved.

## Evaluating the options

Having established some basic criteria, the process of examining the various organizational options can begin. This brief discussion will serve as a starting point for consultations with all stakeholders.

As presented above, the nine options can be viewed in order of increasing ambitiousness. Similarly, the degree of **effectiveness** has been generally found to increase with each successive option.<sup>4</sup> This is largely related to the progressively greater commitment of each option to transit co-ordination.

<sup>4</sup> Experience in places that have instituted a full federation, such as Hamburg, Germany, demonstrate the ability of the central body to effectively deal with key aspects of transit. Even limited federations, such as in Montreal, do not achieve anywhere near the same level of effectiveness.

### Evaluating the options *continued...*

**Responsiveness** is more difficult to evaluate. While the current local autonomy arrangement enables direct response to local issues, this is only one part of the picture. Inter-municipal travellers, for instance, are not usually considered. For regional issues, and for issues of accountability such as meeting certain commitments and responsibilities, the latter options with specific organizational bodies, could be more responsive.

As to **implementation**, it can be expected that the more ambitious the option, the more restructuring involved, and therefore the greater the degree of difficulty. It will require all partners to rise to the greater challenge of implementing innovative changes. A similar relationship will also likely be the case with the costs involved. Federation and

Amalgamation options would involve greater expenditures than the Co-ordination options, at least initially. However, it should be noted that the costs involved will be only a tiny fraction of the overall operating costs of the transit systems. Furthermore, the more ambitious options, while potentially costing more at the start, will ultimately be the most cost-effective (by reducing redundancies) and have been seen to more than pay for themselves through increased ridership and other savings.

An initial assessment would favour the Federation model as offering the best potential for achieving a workable compromise between the necessary high degree of co-operation to realize the four essential principles, while still maintaining the individual identity and autonomy of each participating municipality.

### Conclusion

Key to improved transit integration will be the acceptance and participation by all the partners in the process. There must be a full discussion of the range of important issues that need to be addressed and a careful consideration of the impact of any change.

Each partner will have distinct priorities and concerns that will have to be addressed. Transit users will clearly prefer those options which maximize the integration of service, fares, and information. The general public will be most interested in a highly cost-effective system that will meet the greater area transportation needs. High priority for municipalities and the operators will be to avoid major disruptions of the current institutional environment.

It is anticipated that these, and many other views, will all be considered during a consultation process. The goal is to enable each partner to develop internally a collectively shared view on a new paradigm for transit service delivery in the GTA. Subsequently, all partners can contribute towards the shaping of the recommendations for implementation.











ISBN# 0-7778-1235-5

